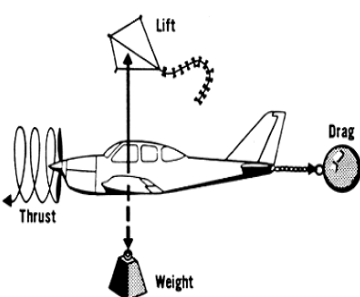


Presentation Plan

| <p align="center">Subject Area: <u>AEROSPACE EDUCATION</u></p> <p>Topic: <u>DYNAMICS OF FLIGHT</u> (Presentation time <u>50 minutes</u>)</p> | |
|---|---|
| Detail | Notes |
| <p>Objective: In this topic, the cadet will; experience the forces that affect flight by balancing trimming and flying their model airplanes.</p> <p>Why does the cadet need to know this? Descriptive information will be better incorporated by the cadet through direct experiential learning.</p> <p>Equipment: Paper Airplanes Paper Clips Rubber Bands</p> <p>Instruction: Draw a schematic of an airplane on the board. Explain: Weight & Balance Center of Gravity Center of Lift Dynamics of Flight Lift, Gravity, Thrust, Drag Glide Ratio Describe the function of: Rudder, Aileron, Elevator Pre-Flight Fuselage Straight? Main Wing perfectly matched, inclined the same? Horizontal Stabilizer straight & flat? Vertical Stabilizer straight & flat? View from both front & rear. Explain Trim Procedures. Fly-trim-Fly, Correct Left/Right first then Up/Down Highlight Control Interactions</p> <p>Activity: Have cadets trim their airplanes for best glide. Conduct competition for: Longest Flight Duration Longest Flight Distance Straightest Flight Most Accurate, Closest to Target</p> |  |

